

BEFORE THE TENNESSEE EMERGENCY COMMUNICATIONS BOARD

Nashville, Tennessee

October 1, 2004

IN RE: RESOLUTION OF THE BOARD OF MAYOR AND ALDERMEN OF MOUNTAIN
CITY, TENNESSEE, REQUESTING REVIEW OF A DECISION OF THE BOARD OF
DIRECTORS OF THE JOHNSON COUNTY EMERGENCY COMMUNICATIONS
BOARD PURSUANT TO TENN. CODE ANN. § 7-86-312

ORDER GRANTING PETITION FOR RECONSIDERATION

This matter came before the Tennessee Emergency Communications Board ("Board" or "TECB") on a *Petition for Reconsideration* filed by the Town of Mountain City, Tennessee. The *Petition* was deliberated during a public meeting convened on September 10, 2004.

Background

On September 9, 2003, the Board of Mayor and Aldermen of the Town of Mountain City adopted a resolution pursuant to Tenn. Code Ann. § 7-86-312 requesting the Board to review a decision of the Board of Directors of the Johnson County Emergency Communications District ("ECD") to terminate the 911 dispatching services it was providing to Mountain City.

Descriptions of the underlying controversy between Mountain City and the ECD and the Board's January 15, 2004 deliberations on this matter are memorialized in the *Interim Order* issued on March 31, 2004. The Board's May 27, 2004 deliberations on this controversy are memorialized in the *Final Order*, issued on June 9, 2004. (Both Orders are available on the TECB website: <http://www.state.tn.us/commerce/911>).

At the close of its May 27 deliberations, after it became obvious that the parties had been unsuccessful in complying with the Board's previous directives to sit down together and try to work out a compromise, the Board directed the ECD to continue dispatching for Mountain City and directed Mountain City to continue paying at least \$60,000 annually for the dispatching service. The Board also granted the District's request for an increase in its service charge on residential lines to \$1.00 per line.

On July 30, 2004, the Town of Mountain City, acting through its attorney George Wright, filed a *Petition for Reconsideration*. The *Petition* requested that the Board reconsider its May 27 decision, arguing that the Town believed that the Board fully answered its request by requiring the ECD to continue providing dispatching to the Town. The *Petition* argued that the Board lacked the authority to require the Town to make any contribution to the ECD. The *Petition* asserted that the Town would agree to contribute to the ECD in proportion to the ratio of emergency calls its citizens made, if the emergency telephone service charge on business lines in Johnson County was

increased. The *Petition* further argued that the Town had the right to dispatch its own calls, and asserted that such "may be the Town's only alternative given the current state of negotiations/communications with the Johnson County ECD."

On August 6, 2004, the Board notified counsel for the Town that the *Petition* would be placed on the agenda for the September 10 Board Meeting.

The September 10, 2004 Board Meeting

At the September 10, 2004 Board Meeting, the Johnson County ECD Director, Eugene Campbell, and ECD Board Member, Tom Taylor appeared on behalf of the ECD. Attorney Mike Mahn appeared on behalf of Mountain City for the limited purpose of arguing that the Board lacked jurisdiction to order the town to contribute to the ECD. No other representatives from Mountain City appeared.

The Board first considered whether to reconsider its May 27 decision. General Counsel requested the Board to reconsider the matter, noting that when the Board had previously deliberated this dispute, there had been much discussion about the Town providing its own dispatching and the value of the dispatching service provided by the ECD, but none of the parties offered evidence to substantiate their opinions. General Counsel requested that the Board consider evidence offered by the Board's new technical consultant on the cost and value of the dispatching. She noted that the consultant had gone to Mountain City and talked to the Mayor and City Recorder, among others, and had reviewed the district's operations.

The Board unanimously voted to reconsider its decision. Mike Mahn then offered an opening statement, arguing that Tennessee law did not empower the Board to require cities and counties to contribute to ECDs. He maintained that the amount they contributed to ECDs, if any, was a matter the local governmental entities had to work out for themselves.

General Counsel commented that Tenn. Code Ann. § 7-86-312 authorized the Board, upon request, to review decisions of ECDs that affect financial standing and the level and quality of 911 service. She noted that Mountain City itself had requested the Board's involvement in this dispute under Tenn. Code Ann. § 7-86-312 and that the dispute unquestionably involved financial standing and the level or type of 911 service provided. She further asserted that the decision the Board was reviewing was not just whether the ECD would continue dispatching for the Town, as the Town tried to characterize the issue. The decision under review was whether the ECD was required to continue dispatching for the Town after the Town substantially decreased its contribution to the ECD. General Counsel noted that Tenn. Code Ann. § 7-86-307(a)(2) also authorizes the Board to "act as the deciding agency" whenever issues about a district's financial standing or the level and quality of 911 service arise between a district and other governmental units. General Counsel observed, however, that until the matter was litigated, the reach of the Board's jurisdiction would likely remain an open question.

General Counsel then offered the opinion of Curt Andrich, a representative of the Board's new Technical Consultant, L.R. Kimball. His report was offered into evidence and is attached hereto as Exhibit "A." Mr. Andrich was first asked to describe his education, experience and training in emergency communications. He then reported that this dispute arose after the ECD moved its operations to the newly constructed

Johnson County jail, a secure, modern, well equipped facility that the ECD leases from the County for \$1 per year. His report stated that representatives of the Town had admitted that if the ECD had not moved, the Town would have continued funding the ECD at the previously budgeted levels. Mr. Andrich recounted the Town's complaint that its residents pay both city and county taxes and thus more than their share for ECD services.

Mr. Andrich reported that at no point during his investigation was the quality or level of 911 service provided by the ECD ever criticized. His report notes that the ECD employs seven (7) full time telecommunicators and seven (7) part time personnel who provide full emergency medical dispatching to the community; and normally two (2) telecommunicators are on duty at all times. During his site visit, Mr. Andrich observed that the ECD's computerized call counting system was not operable, so reliable statistics on the number of calls answered for Mountain City were not available. He reported that previous statistics on the number of calls had been hand tabulated and did not account for all calls.

When asked about the value of the dispatching that the ECD provided to Mountain City, Mr. Andrich estimated that the total annual value was approximately \$115,000, taking into account the salaries and benefits that Mountain City would have to pay its own dispatchers, the cost of utilities and equipment maintenance. The costs of purchasing equipment were not included in this calculation because such costs constitute one-time expenditures that could be depreciated over the life cycle of the equipment.

When asked about the cost involved should the Town establish its own dispatch center to accept the Town's 911 calls transferred from the ECD, Mr. Andrich asserted that initial costs for the Town to set up its own dispatching would be approximately \$166,000 for telephone equipment, a mapping display system, 911 trunking, a logging recorder, electrical grounding and upgrades and a 10% contingency fund. He added that annual recurring costs would be approximately \$124,000 to cover equipment maintenance, trunking service fees, utilities and other operating costs, salaries and benefits for four full-time telecommunicators. Mr. Andrich suggested that Mountain City appeared willing to pay for dispatching based on a calculation that included call volume, but that reliable statistics over at least a six (6) month period would be necessary to establish a reliable call volume.

During deliberations, the ECD indicated that it had received no contributions from Mountain City during the 2004-2005 fiscal year, though Mountain City had appropriated a \$25,000 contribution. The ECD indicated that without a contribution from Mountain City, the ECD would reach a financial shortfall some time in the third quarter.

After considerable discussion, the Board unanimously voted to give Mountain City the following three options: (1) pay the ECD \$60,000 per year for dispatching, which, it was noted, is a substantial bargain according to the expert's report; (2) dispatch its own 911 calls, which would be transferred from the ECD; or (3) agree to mediate this dispute after obtaining a sufficient amount of computer-generated call statistics and continuing to pay the \$60,000 pro rata.¹ Mountain City was directed to inform the Board of its choice within 45 calendar days.

¹ During deliberations, obtaining such statistics over a period of a year was mentioned.

IT IS HEREBY ORDERED THAT:

1. The *Petition for Reconsideration* filed by Mountain City is granted;
2. Johnson County ECD is directed to continue to dispatch emergency calls for Mountain City;
3. Mountain City is directed to select one (1) of the following options:
 - (a) Continue its contribution of \$60,000 per annum to the ECD for dispatching services;
 - (b) Establish its own dispatching services for the citizens of Mountain City within a reasonable time, with the ECD utilizing the transfer method with regard to calls from Mountain City; or
 - (c) Continue to pay, pro rata, the \$60,000 annual contribution to the ECD while reliable, system-generated call statistics are obtained, after which the parties will participate in mediation with a certified mediator.
4. Mountain City is directed to notify the Board of the option it has selected no later than forty-five (45) calendar days from September 10, 2004.²

This 1st day of October, 2004.

Randy Porter w/ permission HQ
Randy Porter, Chairman

Wanda Moody w/ permission HQ
Wanda Moody, Vice Chairman

Tom Beehan w/ permission HQ
Tom Beehan, Board Member

Charles Bilbrey w/ permission HQ
Charles Bilbrey, Board Member

² During its July 16, 2004 meeting the Board adopted Policy No. 24 which states as follows:

Effective July 16, 2004, in order to be effective all notices and notifications to the Tennessee Emergency Communications Board ("TECB") shall be provided in writing to the Executive Director at the TECB offices located at 500 James Robertson Parkway, Nashville, Tennessee 37243.

Ike Lowry w/ permission of
Ike Lowry, Board Member

Freddie Rich w/ permission of
Freddie Rich, Board Member

David Purkey w/ permission of
David Purkey, Board Member

³ Ms. Cobb did not participate in the deliberations.

⁴ Mr. Vickers did not participate in the deliberations.

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Exhibit A

1 INTRODUCTION

Johnson County, Tennessee (the County) is located in the northeastern corner of the State of Tennessee. The County covers an area of 299 square miles, and according to United States Census Bureau estimates for 2003, the population of the County is 17,948. According to these figures, the population of the County has grown at an average of .85 % each year over the past three years. There is only one incorporated town in the County, and that is the Town of Mountain City (the Town). The county seat is located in the Town, and the Town has a population of 2,500 per the 2000 Census Bureau figures. The County is primarily rural, with several small industrial firms, which are primarily in the forestry and textile industries.

Over the past year, a dispute has surfaced between the County and the Town over the operations of the Johnson County Emergency Communications District (JCECD), which handles all public safety communications (i.e., 9-1-1 call answering, and dispatching) for all public safety agencies in the County.

This report presents information and recommendations to the State of Tennessee Emergency Communications Board (ECB) in order for the ECB to be able to make informed decisions pertaining to this dispute. Information in this report was obtained through interviews with key individuals at the JCECD and the Town, and through the review of documents provided to the ECB and its staff by the JCECD and the Town.

2 BACKGROUND

The JCECD was established and went operational sometime in 1998. At the time, JCECD combined emergency call answering and dispatching for all public safety agencies in the County and Town, except for the Johnson County Sheriff's Department (JCSD). Calls for the JCSD were answered at the JCECD facility and then information was relayed to the JCSD, which ran its own dispatch center at its office. An agreement between the County, the Town, and the JCECD was made that the Town would reimburse the JCECD for the salaries of four (4) full time telecommunicators. These telecommunicators replaced the four telecommunicators that the Town had employed for its operations previously. This agreement was never formalized in writing by any of the parties involved, but the understanding was that whatever the JCECD operating costs were above what was collected in 9-1-1 surcharges, grants, and other revenues, the balance would be provided by the Town and the County on an equally shared (50%) basis. The Town and the JCECD worked very closely to provide a building capable of supporting operations. Equipment for the building was purchased using grant money that the County had secured for the JCECD. In Table 1, information provided by JCECD shows what operational payments have been made by the Town and County since the establishment of the JCECD.

Sometime during the 2002-2003 timeframe, the JCECD and the County entered into discussions about the JCECD moving its operations to a new Sheriff's Department facility being built that would house the Jail and JCSD offices. At the time, the JCECD was exploring ways to fund upgrades to equipment at its current site, but did not have the funding. The County offered the JCECD space at the new facility, as well as the County providing the funds for the updated equipment that the JCECD was trying to purchase. The building space and the new equipment would be leased to the JCECD for a cost of \$ 1.00 per year. An agreement was reached between the County and the JCECD, and in December of 2003, the JCECD moved its operations to the new facility.

It appears that as a result of this decision to move, tensions between the County, the Town, and the JCECD rose quickly to a very high level, resulting in the dispute that is now being reviewed.

Table 1.
Payments Made To the Johnson County Emergency Communications District

YEAR	TOWN	COUNTY
1997-1998	\$0	\$ 243,234 ¹
1998-1999	\$ 76,921	\$ 84,170
1999-2000	\$ 74,938	\$ 46,115
2000-2001	\$ 74,800	\$ 37,440
2001-2002	\$ 68,497	\$ 42,000
2002-2003	\$ 63,100	\$ 61,500
2003-2004	\$ 28,460	\$ 242,202 ²

¹ Initial grant money to purchase equipment for the new JCECD dispatch center

² \$200,000 of this total was for new equipment at the JCSD facility for the JCECD

In Table 2, call volume statistics are presented. These numbers only reflect the number of actual responses that were generated by calls to the JCECD. The numbers do not include calls such as administrative lines, non-emergency calls, or calls handled for other non-public safety agencies (i.e., water department, electric co-op). It should also be noted that these statistics were generated by a hand count of incident run cards as there are no automated call management or CAD systems in use by the JCECD.

Table 2
Calls For Service Calendar Year 2003

MONTH	COUNTY	TOWN	TOTAL
January	83	103	186
February	93	96	189
March	96	147	243
April	94	128	222
May	100	229	329
June	101	206	307
July	111	207	318
August	87	188	275
September	101	172	273
October	100	186	286
November	112	169	281
December	200	137	337
TOTALS	1,278	1,968	3,246

In Table 3, data is presented to account for the volume of calls for the months of January through April of 2004. Again, the numbers do not include calls such as administrative lines, non-emergency calls, or calls handled for other non-public safety agencies (i.e., water department, electric co-op). It should also be noted that these statistics were generated by a hand count of incident run cards as there are no automated call management or CAD systems in use by the JCECD.

Table 3
Calls For Service – January 2004 Through April 2004

MONTH	COUNTY	TOWN	TOTAL
Jan-Apr	1101	565	1,666

Data in Table 2 suggests that the Town accounted for 61% of all calls for service handled by the JCECD. However, in Table 3 the count suggests that the Town generated 34% of all calls for service. It is unknown if this is a trend developing or if this is the result of potentially inconsistent record keeping.

The Johnson County community is served by two (2) telephone companies. The Local Exchange Company (LEC) is Sprint, and the Competitive Local Exchange Company (CLEC) is Skyline. Table 4 reflects the number of business and residential lines each company provides. It should be noted that the JCECD does not have a breakdown of how many of these lines are within the Town limits.

Table 4
Telephone Line Counts

COMPANY	RESIDENTIAL	BUSINESS	TOTAL
Sprint	6,628	1,496	8,124
Skyline	467	43	510
TOTALS	7,095	1,539	8,634

3 SITE VISITS AND INTERVIEWS

An interview with Mr. Eugene Campbell, the director of the JCECD, was conducted on September 2, 2004. A visual assessment of the JCECD 9-1-1 center was also conducted at this time. Interviews and a site visit with the Town were also conducted later that day. Individuals from the Town who were interviewed were: Harvey Burniston, City Mayor; Terry Reece, City Recorder; and Jeff Shaw, former director of the JCECD.

3.1 JOHNSON COUNTY 9-1-1 CENTER

The Johnson County 9-1-1 Center is located in a building at 999 Honeysuckle Rd in the Town. This is a building that houses the 9-1-1 Center, the offices of the Johnson County Sheriff's Department, and the Johnson County Detention Center. The building was opened in 2003, with the JCECD moving its operations there in December of 2003. Prior to this time (1998 to December 2003), the JCECD had its operations located in building owned by the JCECD that was in the Town near the Johnson County Rescue Squad facility. No visit or inspection of that building was conducted. The JCECD pays an annual lease fee to the Sheriff's Department of \$1.00.

The JCECD facility is a modern, well equipped facility. The center uses a CML Corporation "Rescue Star" E 9-1-1 telephone system (CPE) that was installed new when the operations moved to the facility in 2003. Radio dispatch uses a Zetron computer based console system that was also installed new when operations were moved to this facility. These two systems were provided by the Johnson County Sheriff's Department to the JCECD at no cost when JCECD moved into the building. The JCECD is receiving Phase 2 wireless 9-1-1 calls and the Rescue Star equipment is capable of handling and processing the information. The 9-1-1 Center also has a map display system that interfaces with the CPE to provide location finding technology through the provided Phase 2 wireless information. The map display system is manufactured by GeoConnect of Knoxville, TN. This system was paid for with a grant for mapping display systems from the ECB. There is no computer aided dispatch (CAD) system in use, but the JCECD is applying for grants to purchase one in the near future.

The 9-1-1 Center consists of two (2) positions that are configured the same that are capable of handling call taking and radio dispatch operations. These positions are located in an office at the facility that also houses the warrant and administrative offices of the Sheriff's Department. Photographs of the facility are provided in Appendix A of this report.

The 9-1-1 Center receives incoming 9-1-1 calls through four (4) telephone trunk lines. Two of the trunks carry wireline 9-1-1 calls, while the other two handle only wireless 9-1-1 calls. The Center is also served by six (6) incoming administrative lines, one of which is the old emergency number for the Johnson County Rescue Squad.

Staff at the JCECD consists of seven (7) full time telecommunicators and seven (7) part time personnel. Full time personnel receive a benefits package from the JCECD, while part time personnel do not. Descriptions of the salary and benefits package are provided in Appendix B of this report. The telecommunicators primarily work a twelve (12) hour shift schedule, with two telecommunicators scheduled to work at all times.

The JCECD provides full emergency medical dispatch (EMD) services to the Johnson County community. EMD is a process of providing pre-arrival instructions on a medical situation while the rescue squad is responding. All personnel at the JCECD are fully qualified and trained in providing EMD. Due to requirements of EMD operations, there are normally two (2) telecommunicators on duty at all times in the center. In addition to the ECD personnel in the office, there is a warrant clerk from the Sheriff's Department on duty in the office at all times. If calls for service become excessive, this person will help answer the administrative phones if the JCECD personnel are tied up on the emergency lines or the radios. The Sheriff's Department does not charge the JCECD for this assistance.

There are also two (2) terminals that are connected to the Tennessee and national criminal information networks. One terminal is paid for the County, the other by the Town. The Town's terminal is physically located in the dispatch office, while the Sheriff's Department terminal is in another part of the building.

Currently, the Town and the County pay full fees to the State for these two terminals. All personnel are trained in the operation of these terminals.

The JCECD provides call taking and dispatch services for the following public safety agencies:

Johnson County Sheriff's Department
Mountain City Police Department
Eight Volunteer Fire Departments in the County
Mountain City Fire Department
Johnson County Rescue Squad

The JCECD also provides call answering services and emergency call out paging for the following organizations:

Mountain City Water Department
Mountain Electric Co-Operative³
A private alarm monitoring service⁴

As stated earlier, the JCECD moved to the Sheriff's Department facility in December of 2003. Its previous building was owned by the JCECD and had equipment (CPE and radios) that was paid for with a grant that was received when the JCECD was established in 1998. Mr. Campbell stated that the equipment at the previous center was operational, but in need of upgrades to be brought up to the standards and capabilities required for Phase 2 wireless operations. Mr. Campbell states that the old building has been leased back to the County Elections Board for a fee of \$1.00 per annum.

At the time of the visit, Mr. Campbell was unable to provide up-to-date statistics regarding number of calls received at the Center due to computer problems. He advised that there is an automated call management system that is part of their 9-1-1 telephone system; the call management system has not been used due to operational problems since the new center opened. He states that they are currently trying to work with their vendor (Sprint) to get the system to

³ A fee is paid to the JCECD for this service

⁴ A fee is paid to the JCECD for this service

work correctly. Call totals that are included in this report were provided by the JCECD by hand tabulating "run cards" that are generated when a call coming into the 9-1-1 Center causes a response by a public safety agency. These numbers do not account for administrative calls and other calls handled by the 9-1-1 Center.

3.2 TOWN OF MOUNTAIN CITY

The Town is the seat of County government in Johnson County. The Town offices are located in the Municipal Building, located at 222 S. Church Street. Included in this building is the headquarters of the Town Police Department. The Town had handled its own call answering and dispatch of public safety resources before the JCECD was established. At the time, the Town employed four (4) full time telecommunicators to handle the duties.

At Police Headquarters, the Town has two (2) offices that are set aside for possible use as a dispatch center. Currently there is no 9-1-1 CPE at the location, no mapping display system, or CAD system. There is a radio control-station that can be used to communicate with units in the field. While the rooms set aside do have the space for telecommunicators to operate, the electrical wiring, grounding, and building security will all need significant upgrades in order to be brought up to the industry standards needed to support the specialized equipment and operations that would need to be installed. There will also be a need for "back-room" space to house the electronics of the equipment.

The Town was unable to provide statistics on number of police and fire calls for service that its personnel had responded to. It appears that any records that are kept are paper copies of reports, with no centralized records management system. The JCECD provides reports to the Town on occasion showing numbers of calls generated.

4 FINDINGS

The following findings are based upon interviews with officials at the JCECD and the Town, as well as site visits with both organizations.

The JCECD appears to be located in a modern, fairly well equipped facility that is appropriate to the type of operations associated with public safety communications

The lack of automated records management system use by all organizations creates questions about statistical accuracy from all organizations

There is a lack of formal, written, inter-government agreements regarding the funding and operations of the JCECD, which leaves everything open to individual interpretations

The Town feels that the make-up of the JCECD governing board does not adequately allow the Town thorough representation or say in JCECD decisions

The Town has made statements that if the physical re-location of the JCECD had not happened, that they would have continued to provide funding at the levels previously provided

The JCECD feels that the Town has reaped the benefits of upgrades to equipment and services, while not contributing to those upgrades

The Town feels that the County has mis-represented savings that were expected by moving the JCECD to the JCSD facility

The Town does not want to take over dispatch operations from the JCECD

The Town is willing to pay its fair share of JCECD costs through the use of a formula, however, the Town could not suggest what this formula should be based on

The Town is concerned that its residents not only pay Town taxes, but also County taxes, and feel that they are paying for JCECD services several times over

At no point was the quality or level of service being provided by the JCECD to the Town or County ever complained about or brought up.

Based on these findings and attitudes observed, it is the opinion of L. Robert Kimball & Associates that this dispute has nothing to do with the quality or levels of service being provided by the JCECD, but is entirely based on what political organization is perceived as being in control of the JCECD 9-1-1 Center and operations.

5 OPTIONS

The JCECD, the Town, and the County have several different options that could be used to provide emergency dispatch services to its residents, and potentially resolve this dispute. These options are:

Leave all dispatch operations as they currently are, and work with all parties involved to develop inter-governmental agreements that provide for equitable funding for JCECD operations

The Town could establish its own dispatch center and request that the JCECD provide a "relay" service from the JCECD 9-1-1 Center

The Town could establish its own dispatch center and request that the JCECD provide a "direct transfer" service from the JCECD 9-1-1 Center

The Town could request permission from the ECB to establish another ECD to serve the residents of the Town, then build and equip its own dispatch center.

In this section, these options will be explained, and the estimated costs and risks of each will be provided.

5.1 CONTINUE CURRENT DISPATCH OPERATIONS; WORK FOR FUNDING SOLUTION

In this option, operations would stay exactly the same as is currently being done. The JCECD would continue to handle all calls for service from the County and Town and provide direct dispatch service for the Town agencies. An equitable formula for determining what the level of funding for the Town and the County would have to be determined. In most situations, the formula that is used is based on the percentage of calls a locality generates against the total calls for service. In the case of the Town, the statistics that are currently available do not appear to be reliable enough, due to the nature of their collection.

An interim formula could be developed pending the collection of more accurate data. In this case based on the statistics that are available, an even split (50%-50%) could be used pending the new data. Data should cover at least a six (6) month period to account for seasonal fluctuations in activity. When the data has been collected, a formula could be determined easily.

Once the formula has been determined, an inter-governmental agreement between all parties involved will need to be developed and signed by all involved. Typically, the call levels from the preceding year will determine the funding levels for the coming year. This formula should be revised annually to account for growth and call volume changes.

In order for this method to be successful, automated information systems must be used to ensure accurate data. The JCECD already has a call counting software package, but does not use it. This should be made operational immediately. The implementation of a CAD system will also allow for a better accounting of calls generated and be able to assign them to particular agencies. Only through accurate information collection and management can this option be successful. With that said, this option is probably the easiest to implement and will result in little or no additional costs to the JCECD.

5.2 RELAY METHOD

In the relay method of dispatching, the JCECD would still answer all incoming calls for service for all public safety agencies in the County. The personnel would take the caller information, write it out, then have to call the Town Police Department by telephone and “relay” the information to them for actual dispatch.

In this scenario, the Town would not have to purchase any additional equipment for its dispatch center, but would need to staff the center 24 hours per day, 7 days per week. Absolute minimum staffing levels would require one (1) person to be on duty at all times at the Town dispatch center. To provide that level of staffing on a full-time basis, a minimum of four (4) full time telecommunicators would need to be hired to operate the center. Based on current salaries being paid for telecommunicators in the County, the cost of four (4) full time employees, including salary and benefits, would be approximately \$75-80 thousand annually. All 9-1-1 telephone surcharges would still go to the JCECD as it would be the primary public safety answering point (PSAP) for the County. The Town would continue to have to pay for its NCIC connection, at approximately \$7,000 per year.

However, using this method would not provide any relief to the JCECD, as it would still need to staff the 9-1-1 Center with two (2) people at all times to provide EMD services. Additionally, the “relay” process adds time to the actual response of public safety, as well as losing touch with the caller during the process, which can be dangerous to both the caller and responding personnel. Using this method will actually result in higher costs to the residents of the County and Town due to duplication. This method of dispatching is not widely used, and normally is a backup operation when a dispatch center must rely on another to answer calls due to a catastrophic systems failure.

5.3 DIRECT TRANSFER METHOD

In this option, the Town would need to establish a dispatch center that would “mirror” the JCECD 9-1-1 Center. All 9-1-1 calls would be answered by the JCECD. Once it was determined that a call for service was from the Town, the JCECD would “direct transfer” the call to the Town dispatch center. This process includes sending all 9-1-1 call data along with the actual call. In order for the Town dispatch center to process this information, specialized 9-1-1 telephone CPE would need to be installed. A mapping display system would also need to be installed in order to process Phase 2 wireless 9-1-1 calls that the JCECD is receiving. Based on these requirements, Table 5 shows the approximate costs of acquiring the specialized equipment, and Table 6 shows the annual operating costs that may be expected. The costs shown are based on bids and proposals that L. Robert Kimball & Associates has seen over the past 12 months.

Table 5
Direct Transfer Method – Initial Costs

ITEM	COST
9-1-1 Telephone Equipment – 2 positions	\$75,000
Mapping Display System – 2 positions	\$50,000
9-1-1 Trunks from JCECD to Town dispatch center – 2 trunks install fee	\$1,000
Logging Recorder	\$15,000
Electrical/Grounding upgrades to Police HQ	\$20,000
10% Contingency Fund	\$15,100
TOTAL	\$166,100

Table 6
Direct Transfer Method Costs – Annual Recurring Costs

ITEM	COST
9-1-1 Telephone Equipment maintenance contract	\$20,000
Mapping Display System – Maintenance	\$10,000
9-1-1 Trunks Service Fee – 2 trunks	\$2,000
Salaries – Benefits for 4 full time telecommunicators	\$80,000
Utilities, Other Operating Costs (includes NCIC)	\$12,000
TOTAL	\$124,000

For the Town to establish its own dispatch center that would accept direct transfers from the JCECD, the initial costs and the annual operating costs would be substantial. If this method was used, the Town would not be eligible to collect 9-1-1 surcharge fees as all calls would still be going to the JCECD as the primary PSAP for the County. State ECB grants would probably not be available for the Town to cover these costs the JCECD would be the primary PSAP. The JCECD would still need to have two telecommunicators on duty at all times to properly conduct EMD operations, so there would be no cost saving to the JCECD. The implementation of this method will cause additional costs to the residents of the Town as the Town will have to pay all fees associated with the dispatch center.

5.4 ESTABLISH A NEW EMERGENCY COMMUNICATIONS DISTRICT

In this option, the Town would request permission from the ECB to establish a new ECD for the Town only. While this option is a possibility, the ECB has a standing policy that promotes consolidation of public safety operations for an entire county, which would make this option unlikely.

In this option, if the Town received authorization from the ECB to form its own district, the Town would need to fully equip its dispatch center to be able to process all 9-1-1 calls that originated in the Town. Work would need to be done with the local telephone companies to determine what telephones are in the Town, and then install telephone trunks that would route those calls directly to the Town 9-1-1 center. A minimum of four (4) trunks would need to be installed to handle wireline and wireless calls and provide an acceptable level of redundancy. The Town would be responsible for answering and dispatching all police, fire and medical calls that originate in the Town. If the Town were to go with the minimum staffing needed for basic operations, four (4) full time telecommunicators would need to be hired, with one (1) on duty at all times. If the Town was required to provide the same level of EMD service to its residents that the JCECD was providing, eight (8) full time telecommunicators with two (2) on duty at all times would be required. In this option, the new ECD would probably be eligible for reimbursement of some equipment costs from the ECB. Table 7 shows the estimated initial costs of establishing a new ECD and acquiring the needed equipment.

Table 7
Establish New ECD – Initial Costs

ITEM	COST
9-1-1 Telephone Equipment – 2 positions	\$75,000
Mapping Display System – 2 positions	\$50,000
9-1-1 Trunks from JCECD to Town dispatch center – 4 trunks install fee	\$2,500
Logging Recorder	\$15,000
Electrical/Grounding upgrades to Police HQ	\$20,000
10% Contingency Fund	\$16,250
TOTAL	\$178,750

Table 8 shows the estimate annual operating costs if the Town was to establish a new ECD.

Table 8
Establish New ECD – Annual Recurring Costs

ITEM	COST
9-1-1 Telephone Equipment maintenance contract	\$20,000
Mapping Display System – Maintenance	\$10,000
9-1-1 Trunks Service Fee – 4 trunks	\$4,000
Salaries – Benefits for 4 full time telecommunicators (double this for full EMD)	\$80,000 (\$160,000)
Utilities, Other Operating Costs (includes NCIC)	\$12,000
TOTAL	\$126,000 (\$206,000)

As stated earlier, this option is not very likely to occur with the ECB policy that goes directly against the idea. However, if it were to occur, the initial costs of building the new ECD 9-1-1 Center and its annual costs would be a significant cost to the Town.

6 VALUE OF DISPATCH SERVICES TO MOUNTAIN CITY

The value of the services that the JCECD is providing to the Town can be determined by evaluating what steps the Town would have to immediately implement to take over the responsibility of dispatching its own public safety agencies and what those costs would be.

The immediate value of the services that the JCECD is currently providing would consist of personnel costs (i.e., salary, benefits), and re-curring operating costs (i.e., utilities, telephone trunks, maintenance). In this case, those costs would be as follows in Table 9.

Table 9
Immediate Annual Value Of Dispatch Services

ITEM	COST
Salaries, Benefits (i.e., insurance, retirement, social security tax, sick leave, vacation leave)	\$ 75,120
Utilities (i.e., phone lines, electric)	\$ 10,000
Equipment Maintenance Contracts	\$ 30,000
TOTAL VALUE	\$ 115,120

There would be other long term costs to the Town (i.e., equipment purchases) that are not figured into this value, due to being a one time cost that can be depreciated over the life cycle of the equipment.

7 RECOMMENDATIONS

Based on the findings of this report, and a review of the different options that are available to the JCECD and the Town, it is recommended that the JCECD continue to answer and dispatch all calls for public safety service for the Johnson County/Mountain City community. This is the most efficient and cost effective solution that is available. As part of this option, inter-governmental agreements must be established in writing that address the issues of funding and representation on the ECD Board. The inter-governmental agreement must also address the issue of funding ECD operations, and what formula will be used to assure payments made to the ECD are equitable. In the interim until accurate call statistics can be obtained, an even split of costs (50% Town, 50% County) will probably be the best method to use. Once accurate statistics are determined, the formula should be based on the percentage of calls for service that are answered. These totals should include all 9-1-1 calls, as well as administrative and non-emergency calls. The agreement should include provisions to adjust this percentage on a yearly basis, based on the prior years call totals.

Most importantly, politics must be removed from the 9-1-1 process completely to ensure that the citizens and public safety providers of the Johnson County community receive the absolute best available service, regardless of where in the County they are.

APPENDIX A

Photos of Facilities

Johnson County 9-1-1 Center





View of Dispatch Room



Console Layout (l to r) – Radio, CPE, Map Display



CML Rescue Star 9-1-1 Backroom Electronics



Former JCECD Building

Mountain City Municipal Building



View of Space Where Dispatch Center Could Be Deployed - 1



View of Space Where Dispatch Center Could Be Deployed - 2



View of Space Where Dispatch Center Could Be Deployed – 3

APPENDIX B

Summary of Salary and Benefits

Johnson County Emergency Communications District

Base Pay:

Full Time Employees	\$7.00 per hour
Part Time Employees	\$6.00 per hour

Benefits:

Full Time Employees	Full Individual Medical Insurance Paid by County
	Retirement System – Employee contributes 5%, County contributes 3.2%
	3 personal days per year
	8 hours sick leave earned per month
	1 week vacation leave per year
	2 weeks holiday leave per year
Part Time Employees	No Benefits